

WHAT IS CLAIMED IS:

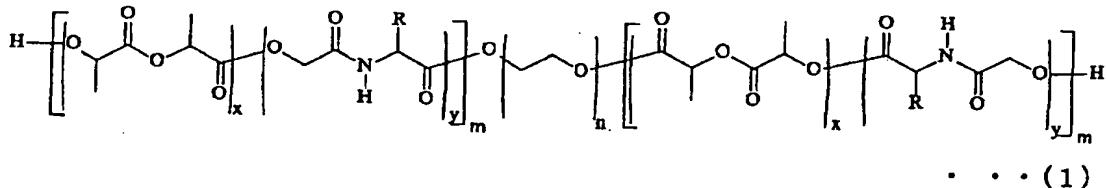
1. An A¹-B-A² triblock copolymer consisting of segments A¹ and A² each composed of a polymer having a depsipeptide unit, and segment B composed of polyalkylene glycol, said 5 copolymer having a number average molecular weight of 8000 to 500000.

2. The triblock copolymer of claim 1, wherein said polymer having a depsipeptide unit is selected from the group 10 consisting of a homopolymer of depsipeptide, and a copolymer of lactide and depsipeptide.

3. The triblock copolymer of claim 1, wherein said polyalkylene glycol is polyethylene glycol.

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4. The triblock copolymer of claim 2, wherein said triblock copolymer is represented by the formula (1):



wherein R stand for a hydrogen atom, CH₃- , CH₃CH₂- , (CH₃)₂CH- ,
20 (CH₃)₂CHCH₂- , CH₃CH₂CH(CH₃) - , C₆H₅CH₂- , C₆H₅CH₂O(C=O)CH₂- ,
C₆H₅CH₂O(C=O)CH₂CH₂- , C₆H₅CH₂O(C=O)NH(CH₂)₄- , C₆H₅(C=O)OCH₂- ,
C₆H₅(C=O)OC(CH₃)H- , CH₃O-C₆H₄-CH-SCH₂- , or
CH₃(CH₂)_{t-1}-S-SCH₂- , provided that t is a positive integer;
x and y each represents the number of repeating units in

segments A¹ and A², x is a number of 0 or more, y is a number of 1 or more, and x and y satisfy the formula $0.04 \leq (y/(x+y)) \leq 1$; m and n each represents a polymerization degree, m is a positive integer, and n is an integer of 100 to 1200.

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5. A method for producing a triblock copolymer of claim 4, comprising ring-opening polymerizing depsipeptide and lactide with a hydroxyl group at each end of polyethylene glycol having a polymerization degree of 100 to 1200, in 10 the presence of a metal catalyst for ring-opening polymerization without a solvent.

6. A biocompatible material comprising an A¹-B-A² triblock copolymer of claim 1 as a main component.

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7. The biocompatible material of claim 6, wherein said triblock copolymer is a triblock copolymer of claim 4.

8. The biocompatible material of claim 7, wherein in the 20 formula (1) representing said copolymer, x and y satisfy the formula $0.04 \leq (y/(x+y)) \leq 0.2$, and n is an integer of 250 to 455.

9. The biocompatible material of claim 6, wherein said 25 polyalkylene glycol in segment B is polyethylene glycol, polypropylene glycol, or polybutylene glycol.

10. The biocompatible material of claim 7, wherein said biocompatible material is a tissue anti-adhesion barrier.